

AMENDMENTS TO THE CLAIMS

This listing, if entered, replaces all prior versions of the claims in the application.

1. (Previously Presented) A method, comprising:
generating a block-level write operation, wherein the block-level write operation causes a value to be written to a region of a primary volume;
identifying whether the region of the primary volume stores a first type of a plurality of types of file system metadata; and
generating information indicative of whether any of the block-level write operation should be transferred to a secondary site during replication of data in the primary volume, wherein if the region of the primary volume stores the first type of file system metadata, the information identifies that less than all of the block-level write operation should be transferred to the secondary site.
2. (Original) The method of claim 1, wherein
the block-level write operation and the information are generated by a file system.
3. (Original) The method of claim 1, wherein
the information indicates that the block-level write operation should not be transferred to the secondary site.
4. (Original) The method of claim 3, wherein
the block-level write operation modifies correctable metadata.
5. (Original) The method of claim 3, wherein
the block-level write operation modifies non-essential metadata.
6. (Previously Presented) The method of claim 1, wherein
the information indicates that less than all of the block-level write operation should be transferred to the secondary site.

7. (Original) The method of claim 6, wherein the information indicates that logical information associated with the block-level write operation should be transferred to the secondary site instead of transferring the value, and the logical information identifies a source address, from which to read the value, and a length of the value.
8. (Original) The method of claim 7, further comprising: reading the value from the source address on a secondary volume comprised in the secondary site; and writing the value to the destination address on the secondary volume.
9. (Original) The method of claim 6, wherein the block-level write operation is being performed to modify fewer than all units of metadata in a group of metadata addressed by the block-level write operation, and the information indicates that new values of only certain units of metadata in the group of metadata should be transferred to the secondary site.
10. (Original) The method of claim 9, further comprising: transferring less than all of the block-level write operation to the secondary site; and updating only the certain units of metadata on a secondary volume comprised in the secondary site.
11. (Original) The method of claim 1, further comprising receiving the block-level write operation and the information; and transferring less than all of the block-level write operation to the secondary site in response to the information.
- 12-17. (Canceled)
18. (Previously Presented) A system comprising: a processor; and

a memory coupled to the processor, wherein the memory stores program instructions executable by the processor to:

generate a block-level write operation, wherein the block-level write operation causes a value to be written to a region of a primary volume,

identify whether the region of the primary volume stores a first type of a plurality of types of file system metadata, and

generate information indicative of whether all of the block-level write operation should be transferred to a secondary site during replication of data in the primary volume, wherein if the region of the primary volume stores the first type of file system metadata, the information identifies that less than all of the block-level write operation should be transferred to the secondary site.

19. (Original) The system of claim 18, wherein the information indicates that none of the block-level write operation should be transferred to the secondary site.

20. (Previously Presented) The system of claim 18, wherein the information indicates that less than all of the value should be transferred to the secondary site.

21. (Canceled)

22. (Canceled)

23. (Previously Presented) A computer readable medium comprising program instructions executable to:

generate a block-level write operation, wherein the block-level write operation causes a value to be written to a region of a primary volume,

identify whether the region of the primary volume stores a first type of a plurality of types of file system metadata, and

generate information indicative of whether all of the block-level write operation should be transferred to a secondary site during replication of data in the primary volume,

wherein if the region of the primary volume stores the first type of file system metadata, the information identifies that less than all of the block-level write operation should be transferred to the secondary site.

24. (Original) The computer readable medium of claim 23, wherein the information indicates that none of the block-level write operation should be transferred to the secondary site.

25. (Previously Presented) The computer readable medium of claim 23, wherein the information indicates that less than all of the value should be transferred to the secondary site.

26-29. (Canceled)

30. (Previously Presented) A system comprising:
means for generating a block-level write operation, wherein the block-level write operation causes a value to be written to a region of a primary volume,
means for identifying whether the region of the primary volume stores a first type of a plurality of types of file system metadata, and
means for generating information indicative of whether all of the block-level write operation should be transferred to a secondary site during replication of data in the primary volume, wherein if the region of the primary volume stores the first type of file system metadata, the information identifies that less than all of the block-level write operation should be transferred to the secondary site.

31. (Canceled)

32. (Previously Presented) The method of claim 1, further comprising:
identifying whether the block-level write operation is being performed to move the value from a first region of the primary volume to a second region of the primary volume; wherein if the block-level write operation is being performed to move the

value, the information identifies that less than all of the block-level write operation should be transferred to the secondary site.

33. (Previously Presented) The method of claim 1, further comprising:
identifying whether the block-level write operation modifies less than all of the region of the primary volume; wherein if the block-level write operation modifies less than all of the region, the information identifies that less than all of the block-level write operation should be transferred to the secondary site.